

REMARKS ON TORONTO METEOROLOGICAL REGISTER FOR JULY, 1864.

Notes.—The monthly means do not include Sunday observations. The daily means, excepting those that relate to the wind, are derived from six observations daily, namely at 6 a.m., 9 a.m., 2 p.m., 5 p.m., and midnight. The means and results for the wind are from hourly observations.

Highest Barometer..... 29.831 at 8 a.m. on 9th; 6 a.m. on 19th } Monthly range = 0.512 inches.
 Lowest Barometer..... 29.319 at 6 a.m. on 2nd }
 { Maximum Temperature 90°2 on p.m. of 31st } Monthly range = 41°2
 { Minimum Temperature 61°42 }
 Mean maximum Temperature 79°36 } Mean daily range = 20°16
 Mean minimum Temperature 59°79 }
 { Greatest daily range 31°2 from a.m. to p.m. of 23rd.
 { Least daily range 5°8 from a.m. to p.m. of 7th.
 Warmest day 19th } Mean temperature 76°17 } Difference = 15°26.
 Coldest day 21st } Mean temperature 61°42 }
 Maximum Solar Radiation 130°9 on p.m. of 16th } Monthly range = 91°0
 Maximum Terrestrial 38°9 on a.m. of 5th }
 Aurora observed on 3 nights, viz.—on 12th, 18th and 19th.
 Possible to see Aurora on 19 nights; impossible on 12 nights.
 Raining on 8 days, depth 1.332 inches; duration of fall 24.7 hours.
 Mean of cloudiness = 0.44; be. w. average 0.04.
 Most cloudy hour observed, midnight; mean = 0.47; least cloudy hour observed, 8 a.m.; mean, = 0.40.

Sums of the components of the Atmospheric Current, expressed in miles.

North.	South.	East.	West.
1836.42	1041.46	710.63	2166.12

Resultant direction N. 61° W.; Resultant velocity 2.23 miles per hour.
 Mean velocity 6.00 miles per hour.
 Maximum velocity 23.4 miles, from 3 to 4 p.m. on 20th.
 Most windy day 21st Mean velocity, 13.82 miles per hour. } Difference = 12.30 miles.
 Least windy day 10th Mean velocity, 1.52 ditto }
 Most windy hour noon to 1 p.m. Mean velocity, 9.43 ditto. } Difference = 6.30 miles.
 Least windy hour 5 a.m. to 6 a.m. Mean velocity, 3.33 ditto.

1st. Sheet lightning in S.E. at 10 p.m.—2nd. Fog at 0 and 8 a.m.—6th. Distant thunder 5 to 7 p.m.—9th. Solar halo at 5 p.m.—10th. Thunderstorm noon to 1 p.m.—12th. Aurora arch and streamers at midnight.—18th. Aurora arch, patches and streamers from 1 a.m.—19th. Aurora patches and streamers 10 to 10.30 p.m.—26th. Fog 6 to 8 a.m.; thunderstorm 3 to 4 p.m.—28th. Thunderstorm 8 to 9.45 p.m.—29th. Sheet lightning in S. and S.W. at 10 p.m.—30th. Sheet lightning in N.W. 10 p.m. and midnight.—31st. Thunderstorm 4 to 6 p.m.

July, 1864, was comparatively warm, dry, windy, and clear. The Rain recorded was less than half the average.

COMPARATIVE TABLE FOR JULY.

YEAR.	TEMPERATURE.				RAIN.				SNOW.				WIND.			
	Mean.	Excess above average (80°).	Max. of day.	Min. of day.	Range.	No. of days.	Inches.	No. of days.	Inches.	Resultant Direction.	Vv.	Resultant Direction.	Vv.	Force.	Mean Velocity.	
1840	65.8	0	79.4	48.2	31.2	6	5.270	...	...	...	...	...	...	...	0.27 lbs.
1841	65.0	-2.0	86.3	43.2	43.1	10	8.160	...	...	...	...	...	...	...	0.33
1842	64.7	-2.3	90.5	42.0	48.5	4	3.050	...	...	...	...	...	...	...	0.44
1843	64.5	-2.6	86.1	40.2	45.9	8	4.605	...	...	...	...	...	...	...	0.19
1844	66.0	-1.0	86.1	40.5	45.6	12	2.815	...	...	...	...	...	...	...	0.30
1845	66.2	-0.8	94.0	45.6	48.0	7	2.195	...	...	...	...	...	...	...	0.29
1846	68.0	+1.0	94.0	44.0	49.1	9	2.895	...	...	...	...	...	...	...	0.19
1847	68.0	+1.0	87.5	43.8	43.7	8	3.355	...	...	...	...	...	...	...	0.19
1848	65.5	-1.5	82.7	46.7	36.0	10	1.890	...	...	...	...	N 14° W	0.18	4.94	4.94 mils.
1849	68.4	+1.4	89.1	51.0	38.1	4	3.415	...	...	...	...	S 5° W	0.75	5.52	5.52
1850	68.9	+1.0	84.9	52.8	32.1	12	5.270	...	...	...	...	N 81° E	0.69	4.50	4.50
1851	65.0	-2.0	82.7	52.1	30.6	12	3.625	...	...	...	...	N 60° W	0.83	4.13	4.13
1852	66.3	-0.2	90.1	49.5	40.6	8	4.025	...	...	...	...	N 43° W	0.93	3.33	3.33
1853	65.6	-1.4	85.4	49.4	36.0	10	0.815	...	...	...	...	S 58° E	0.33	3.69	3.69
1854	72.5	+5.5	93.6	53.0	40.6	9	4.805	...	...	...	...	S 49° W	0.37	4.03	4.03
1855	67.9	+0.9	88.4	53.1	35.3	13	3.245	...	...	...	...	S 19° W	0.73	6.47	6.47
1856	66.9	+0.9	92.0	51.4	40.6	8	1.120	...	...	...	...	N 79° W	1.57	5.84	5.84
1857	67.8	+0.8	85.4	52.4	33.0	13	3.475	...	...	...	...	S 68° E	0.81	4.74	4.74
1858	67.8	+0.8	85.4	55.9	27.5	13	3.672	...	...	...	...	N 15° E	1.13	5.76	5.76
1859	66.9	-0.1	87.7	47.5	37.2	12	2.611	...	...	...	...	N 56° W	1.48	5.81	5.81
1860	63.9	-3.1	85.8	50.5	38.3	13	4.356	...	...	...	...	N 69° W	2.15	7.29	7.29
1861	65.4	-1.6	82.9	49.4	33.5	16	2.635	...	...	...	...	N 74° W	1.43	4.66	4.66
1862	66.7	-0.3	88.6	52.6	36.0	15	5.344	...	...	...	...	S 89° W	1.42	5.80	5.80
1863	67.6	+0.6	82.3	49.3	33.0	15	3.405	...	...	...	...	N 38° W	0.40	3.80	3.80
1864	68.7	+2.7	87.9	52.9	35.0	8	1.532	...	...	...	...	N 61° W	2.23	6.00	6.00
1865	66.08	...	87.10	48.72	38.33	10.3	3.474	...	...	...	...	N 66° W	0.63	4.97	4.97
Exc. for 1864.	2.75	...	0.80	4.18	3.98	2.3	2.142	1.03	1.03